

Vocabulary

Use the vocabulary words and definitions below as a reference for this unit.

- atom** the smallest unit of an element that is still that element; the basic building block of matter
- biochemistry** the study of chemicals directly related to life processes
- bond** the attraction that holds two or more atoms together
- catalyst** a material or substance that increases the efficiency of a reaction without being consumed within the reaction
- chemical equation** a shorthand, symbolic way of telling about a chemical reaction using symbols and formulas
Example: $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$
- compound** a substance formed when two or more elements combine chemically
- covalent bond** a bond between atoms that is made when atoms share their outermost electrons
- DNA (deoxyribonucleic acid)** a complex molecule that controls many functions of living organisms

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electron	the negatively charged particle of an atom; the electron moves around the center of the atom (nucleus)
electron configuration	the number and location of electrons; it determines how substances react and how much energy is involved in these reactions
electron dot structure	a model that represents the electron configuration of atoms; it can be used to make predictions about the bonds between atoms
element	a substance that cannot be broken down into a simpler form by ordinary chemical means
energy level	most likely location where the electron can be found around the center of the atom; any of the possible energies an electron may have in an atom
gas	the form of matter that has no definite shape or volume
ion	an atom or group of atoms that has lost or gained one or more electrons and therefore has a net electric charge
ionic bond	a bond between atoms that is formed when atoms gain or lose electrons; by gaining or losing electrons, the atoms become ions

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- law of conservation of mass** the law that matter cannot be created or destroyed, only changed from one form to another during a physical or chemical change
- molecule** two or more atoms that have a bond of shared electrons
- nucleus** the center region of an atom around which the electron(s) move
- organic** a chemical compound used by living organisms that contain carbon
- pressure** the amount of force acting on a substance
Example: When divers reach the bottom of a pool, the water exerts force against them. This force is often felt as a push against the ears and other body parts.
- proton** the positively charged particle in the nucleus of an atom
- valence electrons** the electrons in an atom's outermost energy level that are involved in the forming of bonds